the same species; and (iii) capability of being crossed with a commercial plant of the same species;

- (b) treating said miniature plants with a mutation-inducing agent to produce a mutant miniature plant population; and
- (c) selecting a mutant miniature plant having the desired trait from said mutan miniature plant population.
- 2. (Amended) The method of claim 1, wherein said population of miniature plants is a population of miniature tomato plants.

Ses 7

14. (Amended) A mutant miniature tomato plant population wherein each miniature tomato plant of said miniature tomato plant population carries in a genome of its cells a distinct mutation induced by an agent selected from the group consisting of a chemical mutagen, or irradiation.

37. (Amended) A method of producing a commercial plant with a desired trait, the method comprising:

- (a) utilizing a population of miniature plants having the following characteristics: (i) uniformly reduced size in comparison to a commercial plant of the same species; (ii) maturation to produce viable seeds or tubers at a plant density of at least ten-fold higher than standard growth conditions used for a commercial plant of the same species; and (iii) capability of being crossed with a commercial plant of the same species;
- (b) treating said miniature plants with a mutation-inducing agent to produce a mutant miniature plant population;
- (c) selecting a mutant miniature plant having the desired trait from said mutant miniature plant population;
- (d) crossing said mutant miniature plant selected in step (c) with a commercial plant of the same species; and